

Atty Dkt. No. 066243-0236 (141210)

Application No. 10/816,641

Listing of the Claims:*This listing of claims will replace all prior versions, and listings of claims in the application:*

1. (Currently Amended) An electrophysiology system comprising:
~~one or more probes configured to be positioned inside a heart of a patient, at least one of the one or more probes being configured to sense electrical information pertaining to the heart;~~
a data processing system configured to be communicatively coupled to the one or more probes configured to be positioned inside a heart of a patient, at least one of the one or more probes being configured to sense electrical information pertaining to the heart, the data processing system being configured to store the electrical information and position information, the position information pertaining to the position of at least one of the one or more probes ~~inside the heart;~~
a display communicatively coupled to the data processing system and configured to display a three dimensional image of the heart;
wherein the electrophysiology system is configured to be coupled to a network and to receive data used to produce the image of the heart over the network.
2. (Currently Amended) The electrophysiology system of claim 1, wherein the ~~image data~~ is acquired using an internal medical imaging system.
3. (Currently Amended) The electrophysiology system of claim 2, wherein the internal medical imaging system ~~is~~ system comprises at least one of a computed tomography imaging system, a magnetic resonance imaging system, an ultrasound imaging system, a positron emission tomography imaging system, ~~single a single photon emission computed tomography, and/or tomography system, or an~~ optical coherence tomography system.
4. (Currently Amended) The electrophysiology system of claim 1, wherein the ~~network is~~ network comprises a wireless network.

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5. (Currently Amended) The electrophysiology system of claim 1, wherein the network includes comprises the Internet.
6. (Currently Amended) The electrophysiology system of claim 1, wherein an internal medical imaging system is coupled to the network, and wherein the ~~image~~ data is acquired using the imaging system and stored on a data storage system coupled to the network before positioning the one or more probes are positioned inside the heart ~~and stored on a data storage system coupled to the network~~.
7. (Currently Amended) The electrophysiology system of claim 1, wherein the ~~image~~ data is stored in a database on the network.
8. (Currently Amended) The electrophysiology system of claim 7, wherein a database management system is used to control the organization, storage and retrieval of ~~images~~ the data in the database.
9. (Original) The electrophysiology system of claim 1, wherein the system is configured to generate a report which comprises the electrical information, the position information, and the image.
10. (Currently Amended) A system comprising:
an electrophysiology system comprising
~~one or more probes configured to be positioned inside a heart of a patient, at least one of the one or more probes being configured to sense electrical information pertaining to the heart;~~
a processor configured to be communicatively coupled to the one or more probes configured to be positioned inside the heart of a patient, at least one of the one or more probes being configured to sense electrical information pertaining to the heart, the processor being used to process the electrical information and position information, the position information pertaining to the position of at least one of the one or more probes ~~positioned inside the heart;~~

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a display communicatively coupled to the processor and configured to display an image of the heart;

a file server communicatively coupled to the electrophysiology system by way of a network, the file server being configured to store data used to produce the image of the heart;

wherein the data used to produce the image of the heart is obtained by the electrophysiology system from the file server by way of the network.

11. (Currently Amended) The system of claim 10, wherein the ~~image~~ data is acquired using an internal medical imaging system.

12. (Currently Amended) The system of claim 11, wherein the internal medical imaging ~~system is~~ system comprises at least one of a computed tomography imaging system, a magnetic resonance imaging system, an ultrasound imaging system, a positron emission tomography imaging system, ~~single a single~~ photon emission computed tomography, and/or tomography system, or an optical coherence tomography system.

13. (Currently Amended) The system of claim 10, wherein the ~~network is~~ network comprises a wireless network.

14. (Currently Amended) The system of claim 10, wherein an internal medical imaging system is used to acquire the ~~image~~ data before the one or more probes is positioned inside the heart, and wherein after the ~~image~~ data is acquired it is stored on the file server.

15. (Currently Amended) The system of claim 10, wherein the file server comprises a database of ~~images which includes~~ that includes a plurality of data sets used to produce a plurality of images, the plurality of data sets includes the data used to produce the image of the heart.

16. (Original) The system of claim 10, wherein the system is configured to generate a report which comprises the electrical information, the position information, and the image.

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17. (Original) The system of claim 10, wherein the processor is used to process the position information to create a structural map of the heart.

18. (Currently Amended) A method comprising:
acquiring data used to produce a three dimensional image of a heart;
storing the ~~image data~~ in a data storage system on a network;
transmitting the ~~image data~~ over the network to an electrophysiology system which uses one or more probes positioned inside the heart to sense electrical information related to the heart and/or to create a structural map of the heart.

19. (Currently Amended) The method of claim 18, wherein the ~~image data~~ is acquired using a using at least one of a computed tomography imaging system, a magnetic resonance imaging system, an ultrasound imaging system, a positron emission tomography imaging system, single a single photon emission computed tomography, and/or tomography system, or an optical coherence tomography system.

20. (Original) The method of claim 18, wherein the electrophysiology system is configured to use at least one of the one or more probes to sense electrical information pertaining to the heart.

21. (Original) The method of claim 20, wherein the electrophysiology system stores position information pertaining to the position of at least one of the one or more probes, the position information being used to create the structural map of the heart.

22. (Currently Amended) The method of claim 18, wherein the ~~image data~~ is acquired in a radiology lab of a hospital using an internal medical imaging system and the electrophysiology system is in an electrophysiology lab of the hospital.

23. (Currently Amended) The method of claim 18, wherein the ~~network is~~ network comprises a wireless network.

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24. (Original) The method of claim 18, wherein the electrophysiology system is configured to generate a report which comprises the image.

25. (Currently Amended) An electrophysiology system comprising:

~~one or more probes configured to be positioned inside a heart of a patient, at least one of the one or more probes being configured to sense electrical information pertaining to the heart;~~

a data processing system configured to be communicatively coupled to the one or more probes configured to be positioned inside a heart of a patient, at least one of the one or more probes being configured to sense electrical information pertaining to the heart, the data processing system being configured to store the electrical information and position information, the position information pertaining to the position of at least one of the one or more probes inside the heart;

a display communicatively coupled to the data processing system and configured to display a three dimensional image of the heart, the three dimensional image being constructed based on a plurality of image slices each of which represents a cross sectional slice of the heart;

wherein the electrophysiology system is configured to be coupled to a network and to receive data used to produce the three dimensional image of the heart over the network; and

wherein the system is configured to generate a report which includes the electrical information, the position information, and the image.

26. (New) The electrophysiology system of claim 1, wherein the one or more probes comprise a catheter.